

IRRIGATION ARRANGEMENTS IN WARREN COUNTY, NORTH CAROLINA

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IRRIGATION ARRANGEMENTS IN
WARREN COUNTY, NORTH CAROLINA

A Report of an Irrigation Survey in Warren
County, Conducted in the Summer of 1962

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Assisted by a grant from the
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and

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Institute of Government
University of North Carolina
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List of publications in U.N.C. Water
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Note: Water Resource Papers 1-12 inclusive may be purchased as a set
for \$1.00.

Introduction

This is one of a group of reports of irrigation surveys made in the summer of 1962 covering eleven North Carolina counties. The surveys are part of a research project concerning arrangements by water users in selected areas of North Carolina to secure water sources. Conducting the surveys was James E. Martin, Jr., currently a second-year law student at the University of North Carolina, under the supervision of Milton S. Heath, Jr.*

Briefly, the purpose of the irrigation surveys is to examine and analyze the following factors:

- .The nature and magnitude of farm irrigation in selected areas.
- .The types of crops irrigated.
- .The sources of water used.
- .The legal arrangements made by the irrigators to secure their sources of water, including purchase of land or water rights, agreements among irrigators and other water users concerning water use, permits required, etc.
- .Any disputes that may have arisen over sources of water affecting these irrigators, and the outcome of the disputes.

With this and other information developed through the research project, it is hoped that an accurate evaluation can be made of the operation of the existing structure of laws and political institutions affecting water use, of its weaknesses and strengths, and of its impact on water resource development.

The procedures followed in this survey are described in detail by Water Resource Paper No. 2. Briefly, the known irrigators were identified with the assistance of county agents and Soil Conservation Service personnel, and then were personally interviewed. A prepared questionnaire was used as a point of departure for the interviews.

*Water Resource Paper No. 1 contains a description of the over-all research project. Water Resource Paper No. 2 summarizes the 1962 irrigation surveys and reviews the procedures followed on the surveys.

IRRIGATION IN WARREN COUNTY



Key:

- REPRESENTS AN ACTIVE IRRIGATOR WHO WAS CONTACTED IN THIS SURVEY DURING THE SUMMER OF 1962.



General Review of Irrigation
in Warren County

Tobacco with an occasional truck farm application comprise the usual irrigation operation in Warren County. There are concentrations of irrigation in the northwest corner of the county west of US Highway 1 and in a five mile strip between the Vance County line and US Highway 401; otherwise, irrigation is generally scattered. Much of the remaining land is in timber, especially in the southeastern quarter of the county. There seems to be little or no irrigation in the northeastern quarter near Gaston Lake.

Warren County has substantial shoreline mileage on two large reservoirs, the afore-mentioned Gaston Lake (constructed by Virginia Electric Power Company--"Vepco") and Kerr Lake (a multi-purpose Corps of Engineers impoundment). Both Vepco and the Corps have adopted the practice of issuing permits for irrigation from their reservoirs. When their offices were visited in the summer of 1962, there were 14 North Carolinians who held Corps permits to irrigate from Kerr Lake, and an indeterminate number of farmers had conditioned the sale of property to Vepco on retention of irrigation privileges. (See Appendix for examples of Vepco deed conditions and Corps permits and letter permits. Most of the outstanding Corps permits are probably of the letter permit variety.)

Summarized Results of Survey

1. Extent of coverage

Suggested list of irrigators (SCS Unit Conservationist and County Extension Chairman)--43

Farms reporting irrigation in 1959 U. S. Census of Agriculture--56

Persons contacted--46

Active irrigators contacted--45

Estimated number of irrigators in Warren County (authors' estimate)--50 (including some who rent systems)

2. Time required for conduct of survey in Warren County

4 days for interviewing irrigators and others

3. Water sources

Ponds--41

Continuous Flow Ponds--40

Surface Ponds--4

Combination Usage--3

Streams--4

Reservoirs--2

Combination of Sources (ponds, streams, reservoirs)--4

Note: The information concerning water sources, including the classification of types of ponds, was derived from the irrigators themselves, not from personal inspection by the authors. An explanation of the terminology used here--e.g., "continuous flow ponds"--will be found in U.N.C. Water Resource Paper No. 2.

4. Types of crops

Tobacco (42 farms)

Largest farm--50 acres

Smallest farm--4 acres

Average farm--17.17 acres

Truck (7 farms: 6, 6, 30, 6, 3, 10, 3 acres respectively)

Mostly cantaloupes with some cucumbers

Pasture (6 farms: 10, 40, 10, 30, 15, 4 acres respectively)

Combination of the above (9 farms)

It should be noted that the figures given above reflect the acreage irrigated and not necessarily the actual acreage of the respective farm.

5. Water usage

There are no reliable data available concerning the amount of water used for irrigation in the area and no mechanical measuring devices are in use. (See Water Resource Paper No. 2 for further comment.)

6. Expansion

No expansion planned--40

(8 out of the 40 purchased systems in either '61 or '62)

Expansion planned (small scale)--5

7. Disputes over water

None reported

8. Purchase of water rights or agreements concerning irrigation

None reported

9. Acquisition of riparian lands, easements, etc.

None reported

10. Recent irrigation trends

The recent droughts have apparently heightened the interest of Warren County tobacco farmers in irrigation. Irrigation is being increased as evidenced by the purchase of approximately 20% of the county's systems in the last two years.

Acknowledgments

SCS Unit Conservationist Nathaniel B. White and Warren County Extension Chairman F. W. Reams gave us invaluable help in identifying and locating irrigators. We are very grateful to them, and to State Conservationist Richard M. Dailey and Howard Ellis of the State College Department of Engineering Extension for their usual generous co-operation.

The map at page 3 was prepared by Charles Nakamura of the Institute of Government.

APPENDIX: IRRIGATION PERMITS

Book 203 Page 287

Grantor--William S. Bugg and A. S. Bugg
Grantee--Vepco

There is further reserved to Owner, for himself, his successors and assigns, the right and privilege, insofar as they may lawfully do so and subject to requirements by regulatory authority, to use the impounded waters of the Roanoke River for the purpose of irrigating the remaining riparian lands of Owner.

Owner agrees that he will not cause pollutants to pass across or through the aforesaid shore lands nor cause any waste, refuse or trash to be or remain thereon, or maintain thereon any nuisance or permit any structures thereon to become dilapidated, unsightly or unsafe, and that he will hold Company harmless against all liability for injury or damage to persons or property resulting from the construction, maintenance or use of any such structures, from the use of the said shore lands by Owner or his invitees, or from the use of the impounded waters of the Roanoke River for irrigation purposes.

PERMIT

To Perform Specified Acts

Reservoir JOHN H. KERR

No.

Pursuant to authority delegated by the District Engineer, U. S. Army Engineer District, Wilmington, N. C., the individual hereinafter named, his agents, servants, or employees, for his convenience, is hereby granted a permit for the sole and express purpose to: (Describe)

at: _____
(Location)

Scope of Permit

The flood control pool is that area between 300 and 320 msl. The power pool is that area between elevations 272 and 300. The elevation of the reservoir may rise into the flood control pool when required by the needs of the flood control and may drawdown below the top of the power pool (300) when required by other project needs. To accommodate this condition, no structure of any kind (e.g., docks, boat houses, piers, etc.) may be placed below elevation 300 unless it is mounted on floats, properly anchored and approved and licensed by the Reservoir Manager. The scope of this permit is limited to such items as brush and vista clearing, construction of walks and boat haulout units, and such other items as do not interfere with free public access, or with operation of the reservoir.

This permit is granted subject to the following conditions:

1. Work is authorized subject to the approval of plans by the Reservoir Manager prior to construction.

2. If the work herein authorized is not completed on or before _____ this authorization, if not previously revoked, shall cease and be null and void.

3. Any items of property placed upon the Government-owned premises under authority of this permit shall be removed upon demand of the Reservoir Manager and in the event of refusal or failure to remove within ten (10) days, the Reservoir Manager may remove or cause the same to be removed without liability to the Government and the cost of such removal shall be borne by the permittee.

4. The exercise of the privileges hereby granted shall be without cost or expense to the United States, under the general supervision and subject to the approval of the Reservoir Manager and subject also to such regulations as may be prescribed by the District Engineer.

5. Permittee shall hold the Government, its officers, agents, and employees harmless from any and all claims of any nature whatsoever arising from or out of the performance of the acts authorized by this permit.

Date

Reservoir Manager

The above instrument, together with all the conditions thereof, is hereby accepted this _____ day of _____, 19____.

(Permittee)

(Address)

Previous editions of this form are obsolete.

Date _____

Dear _____

This will confirm our conversation of _____ concerning a permit to use the John H. Kerr Reservoir for irrigation purposes in connection with the operation of your farm.

It is understood that you propose to irrigate approximately _____ acres of land; and it is assumed that the irrigation equipment and structures will be used on government property only during the time water will need to be pumped from the reservoir; and that no permanent structures or pipe lines will be established on government property. You are accordingly authorized, under these conditional terms, to use the water from the reservoir for your farming purposes. No charge is made for that type of intermittent use.

Should a permanent installation be desired at a later date, that may also be arranged through written request to this office. However, a nominal charge is made for a permanent installation.

It is noted that your temporary line will be located on Tract _____.

If you find that we can be of further assistance to you, please advise.

FOR THE DISTRICT ENGINEER:

Very truly yours,

